

**AMENDMENTS TO THE CLAIMS**

1. (Currently amended) A method of assay in which a component becomes at least partly bound to a solid body characterised in that an analyte dependent parameter associated with said component is kinetically measured in a direct and continuous manner ~~from a time after the onset of incubation and before the assay reaches a substantially steady state and in that~~ the resulting measured analyte dependent kinetic data is manipulated to continuously quantitatively determine an unknown sample ~~and in that the results of the determination are monitored continuously for a period of time after the onset of incubation and before the assay reaches a substantially steady state.~~

2. (Original) A method as claimed in claim 1 wherein said solid body is an optical waveguide.

3. (previously presented) A method as claimed in claim 1 wherein said analyte dependent kinetic data is an optical parameter.

4. (previously presented) A method as claimed in claim 3 wherein said optical parameter is fluorescence emission.

5. (previously presented) A method as claimed in claim 4 wherein said solid body is in the form of a sample containment device.

6. (Original) A method as claimed in claim 5 wherein said device is a capillary fill device.

7. (Previously presented) A method as claimed in claim 1 comprising the steps of

(a) calibrating the assay system for  $x$  samples, each of known analyte concentration ( $C_a$ ), by measuring continuously for each sample independently at a plurality of times ( $t_y$ ) after the onset of incubation the value of said analyte-dependent kinetic data ( $P_z$ ),

(b) for an analyte of unknown concentration ( $C_b$ ) measuring continuously  $n$  independent values of said analyte-dependent parameter ( $P_d$ ) each at time  $t_e$  after the onset of incubation,

(c) combining the data ( $P_d, t_e$ ) from step (b) with the calibration data ( $P_z, t_y, C_a$ ) from step (a) to calculate the unknown dose of analyte ( $C_b$ ) at time  $t_e$ .

8. (Withdrawn) A method of calibrating an assay system for  $x$  samples each of known analyte concentration ( $C_a$ ) comprising:

(a) measuring continuously for each sample independently at a plurality of times ( $t_y$ ) after the onset of incubation the value of an analyte-dependent parameter ( $P_z$ ); and, optionally

(b) fitting the calibration data to a standard equation.

9. (Withdrawn) A method as claimed in claim 8 further comprising the step of storing said calibration data on a storing machine readable encoded data storage device.

10. (Withdrawn) A kit comprising an assay device together with a storing machine readable encoded data storage device which contains calibration data  $P_z, C_a, t_y$  as defined in claim 7 and which is adapted to cooperate with reading means for the purpose of quantitatively determining an unknown analyte.

11. (Withdrawn) A kit as claimed in claim 10 characterised in that the data storing device comprises a bar code marked on the device.

12. (Previously presented) A method as claimed in claim 2 wherein said kinetic data is fluorescence emission.

13. (Previously presented) A method as claimed in claim 1 wherein said solid body is in the form of a sample containment device.

14. A method as claimed in claim 13 wherein said device is a capillary fill device.

15. and 16. (Cancelled).

17 (previously presented). A method as claimed in claim 1 wherein said kinetic measurement, data manipulation and determination monitoring are continued until the assay is considered to have reached a substantial steady state.

18. (previously presented) A method as claimed in claim 1 wherein said kinetic measurement, data manipulation and determination monitoring are discontinued before the assay reaches a substantial steady state.

19. (New) A method as claimed in claim 1, wherein the resulting measured analyte dependent kinetic data is continuously manipulated to continuously quantitatively determine an unknown sample.

20. (New) A method of assay in which a component becomes at least partly bound to a solid body, the assay having been calibrated for  $x$  samples, each of known analyte concentration ( $C_a$ ), by measuring continuously for each sample independently at a plurality of times ( $t_y$ ) after the onset of incubation the value of an analyte-dependent parameter ( $P_z$ ), characterized in that the method comprises the steps:

for an analyte of unknown concentration ( $C_b$ ) measuring in a direct and continuous manner  $n$  independent values of an analyte-dependent parameter ( $P_d$ ) which is associated with said component each at time  $t_e$  after the onset of incubation, and

manipulating said measured analyte dependent parameter to continuously quantitatively determine an unknown sample for a period of time after the onset of incubation and before the assay reaches a substantially steady state by combining the data ( $P_d, t_e$ ) with the calibration data ( $P_z, t_y, C_a$ ) to calculate the unknown dose of analyte ( $C_b$ ) at time  $t_e$ .